

DESCRIPTIONS OF NEW SPECIES OF AUSTRALIAN COLEOPTERA.

BY ARTHUR M. LEA.

PART VI.

MALACODERMIDÆ.

CARPHURUS RHYTIDERES, n.sp.

♂. Elongate. shining, depressed. Red; head at base, eight apical joints of antennæ, a transverse patch at apex of prothorax, scutellum, meso- and metasternum, abdomen (except apical segment, apical half of penultimate and apex and sides of the other segments), coxæ and femora (except knees) black; tarsi infusate or not; elytra coppery-green or blue. Clothed with long straggling blackish hair and with fine whitish pubescence, more noticeable on elytra and abdomen than elsewhere.

Head with fine punctures at base and sides; a distinct fovea on each side in front and a less distinct one behind and between them. *Antennæ* rather stout, scarcely extending to apex of elytra, 3rd-10th joints feebly serrate internally. *Prothorax* transverse, sides round; in front with a deep transverse polished groove; median line very distinct from near base to near apex, polished and traceable across frontal groove; each side with a deep oblique groove starting from the posterior angles and opening out into the frontal groove. *Scutellum* subquadrate, sides and apex slightly incurved. *Elytra* slightly increasing in width to apex, densely and rugosely punctate. *Abdomen* almost impunctate. *Legs* long; anterior tibiæ distinctly bisinuate beneath, the others straight. Length $7\frac{1}{3}$, to apex of elytra $4\frac{1}{2}$; width $1\frac{2}{3}$ mm.

♀. Differs in having the head smaller, with thinner antennæ, the prothorax simple (except for a feeble longitudinal impression),

less transverse and with the black patch less transverse and more rounded.

Hab.—Geraldton, W.A. (on spinifex grass and on several species of *Acacia*).

The sculpture of the prothorax in the male is most remarkable; the three deep grooves (leaving out of consideration the median line) are rather wide and deep, the transverse one deeper than the others, and (intensified by its colour) appearing as if seared in with a red-hot wire; on each side of each of the oblique grooves there is a small (almost fasciculate) tuft of black hair. The female is a typical *Carphurus*, so I have not considered it necessary to generically separate the species.

CARPURUS INVENUSTUS, n.sp.

♂. Elongate, shining, depressed. Head and prothorax of a rather dark red, the former at base clouded with black; antennæ black, the three basal joints red; elytra purplish-black; abdomen black; legs black, the anterior tibiæ and knees and the four posterior tibiæ at extreme base red. Clothed with long blackish hair, sparse on head but denser there than elsewhere, the elytra and abdomen with fine and rather sparse whitish pubescence.

Head narrowed behind eyes, these rather large and prominent; finely and irregularly punctate, a shallow fovea between and slightly in front of eyes. *Antennæ* not extending to apex of elytra, 4th-10th joints rather strongly serrate internally. *Prothorax* longer than wide, sides slightly rounded, apex rounded; transversely depressed at base; impunctate. *Scutellum* almost concealed but evidently reddish. *Elytra* increasing in width to apex; densely and rather finely punctate, base very finely punctate, apex impunctate and polished. *Abdomen* impunctate. *Legs* long and thin. Length 5, to apex of elytra $3\frac{3}{4}$; width $1\frac{1}{2}$ mm.

♀. Differs in having considerably smaller and less prominent eyes, shorter antennæ, and the prothorax less depressed at base and clouded with black on the sides anteriorly.

Hab.—Nowra, N.S.W. (Mr. G. Masters).

A dingy species not very close to any with which I am acquainted.

C. CYANOPTERUS, Bohem. *Hab.*—Mount Barker, W.A.

C. LATIPENNIS, Lea. *Hab.*—Swan River, W.A.

NEOCARPHURUS BASIZONIS, n.sp.

Narrow, shining. Deep glossy black; lower part of head, knees, tarsi and basal segments of abdomen obscure brown; antennæ pale yellow, the four apical joints black; basal two-sevenths of elytra pale testaceous, the extreme base, suture and about scutellum infuscate; base of prothorax testaceous; eyes dingy-green, when wet a beautiful emerald-green. The entire upper surface with long thinly scattered blackish hairs.

Head feebly transverse, almost flat, with a feeble impressed line on forehead; finely punctate; antennæ as in *N. chlorops*. *Prothorax* impunctate, longer than wide, basal third depressed and suddenly and greatly narrowed, slightly increasing in width from basal third to extreme base. *Scutellum* very small. *Elytra* widely emarginate at base, sides slightly increasing in width to apex, about once and one-half the length of prothorax, impunctate. *Abdomen* impunctate, widest in middle. *Legs* long and thin; posterior tibiæ feebly curved. Length $2\frac{3}{4}$, to apex of elytra $1\frac{1}{2}$; width $\frac{2}{3}$ mm.

Hab.—Nowra, N.S.W. (Mr. G. Masters).

The specimen described (judging by its smooth head) appears to be a female, but I have described it as it represents a very distinct species. Mr. Masters obtained two specimens, one of which he kindly presented to me.

BALANOPHORUS MEGALOPS, n.sp.

♂. Elongate, shining, depressed. Black, the elytra with a bluish or purplish gloss; two basal joints of funicle and under surface of 3rd, mouth-parts and extreme base of head, prothorax, basal fifth of elytra, mesosternum, abdomen (except two apical segments), four anterior coxæ, basal half of anterior femora and

extreme base of anterior tibiæ clear reddish-testaceous. Sparsely clothed with long blackish hair, the elytra and legs in addition with fine greyish pubescence.

Head considerably wider than prothorax and almost the width of apex of elytra; eyes very large and prominent, occupying more than half the total width; behind eyes very finely transversely corrugated. Antennæ extending to apex of elytra; 3rd-10th joints pectinate, ramus of 3rd short, of 4th as long as the joint itself, of each of 5th-10th twice as long as the joint, these slightly curved, 11th joint very distinctly curved, its apex slightly thickened and acuminate. *Prothorax* almost twice as wide as long, gently convex, sides very gently rounded. *Elytra* at base about once and one-half the width of prothorax, at apex fully twice as wide; apex conjointly rounded; moderately distinctly punctate. Basal joint of *tarsi* as long or almost as long as the rest combined; comb of anterior indistinct. Length to apex of elytra $3\frac{1}{2}$, of abdomen $4\frac{1}{3}$; width $1\frac{1}{3}$ mm.

Hab.—Otford, N.S.W. (type in Coll. Mr. George Masters).

A small and very pretty species about the size of *B. biplagiatus* or *janthinipennis*, but very different from either; in its large eyes it resembles *B. Macleayi*.

CLERIDÆ.

LEMIDIA OBLIQUEFASCIATA, Gorham.

Not having sufficient literature at present I cannot enter into the synonymy of this species. But as it is an abundant one about the Swan River, and has numerous varieties, some notes may be of use. The species may be beaten abundantly from the blossoms of *Hakea*, *Eucalyptus*, *Dryandra*, &c., in early spring; one of my specimens was reared from the coccid *Brachyscelis strombylosa*.

The form described by the Rev. H. S. Gorham had a black head, reddish prothorax (the disc infuscate), black elytra with a narrow basal stripe, a moderately wide and slightly oblique median fascia, and a small apical spot on each side, red abdomen (the apical segments black), and black hind legs.

I have had under examination the following colour-varieties:—

Var. A.—Median fascia almost white, apical spots wanting.

Var. B.—Prothorax immaculate; median fascia almost white, apical spots absent, legs (except anterior tibiæ) black.

Var. C.—Prothorax immaculate.

Var. D.—Prothorax immaculate, apical spots wanting.

Var. E.—Prothorax immaculate, apical spots wanting; legs black, except anterior tibiæ and inner portion of anterior femora.

Var. F.—Elytra (except for the basal marking) entirely dark.

Var. G.—Prothorax immaculate, elytra (except for the basal markings) entirely dark.

Var. H.—The same, except that the elytra have a decided coppery-green gloss.

LEMIDIA LABIATA, Gorham.

Of fourteen specimens of this species under examination scarcely two are alike in all details; the variety noted by the Rev. H. S. Gorham is perhaps less variable than the more typical forms. Of these one specimen has the pale elytral vittæ very close to the suture, wide and continuous from base to apex, but with a slight interruption at about the middle; one specimen with a black prothorax, and another with a discal blotch only, have each a very distinct and almost white transverse fascia just beyond the middle and almost touching the sides.

LEMIDIA SUBÆNEA, Gorham.

A specimen from Mount Kosciusko has all the legs infusate.

CUPESIDÆ.

CUPES VARIANS, n.sp. (See Supplementary Note on p. 513.)

Flat, narrow, opaque. Of a rather dingy brown; elytra paler, in places feebly mottled; abdomen and legs concolorous with elytra. Head and prothorax densely and uniformly clothed with round muddy-grey scales, almost entirely concealing

the derm; three basal joints of antennæ similarly clothed; the others with short setose pubescence of a rather dingy brown; scutellum with black scales; elytra with round stramineous (in places brown) scales covering the interstices, and placed round the foveæ in such a fashion as to cause them to appear to be granulate. Under surface uniformly clothed with round muddy-grey scales; tarsi, intermediate tibiæ and posterior legs with soft pubescence of a golden tinge, the legs elsewhere squamose.

Head (excluding mandibles) transverse; base widely and shallowly emarginate, a median impression continued from base to between antennæ, an impression on each side close to and continued around eyes. Mandibles stout, strong and irregularly punctate. Eyes large, round, prominent, minutely faceted. Antennæ terminating before middle of elytra, 1st joint large, apex oblique, 2nd small, 3rd-11th cylindrical, 3rd feebly constricted in middle, slightly longer than 1st or 4th, fully twice the length of 2nd, and equal to 11th, 4th-10th almost equal in length. *Prothorax* transverse, disc strongly excavated on each side, middle longitudinal raised and keel-like, and with a distinct median line; lateral margins somewhat raised, near apex projecting as an obtuse tooth; apex narrower than head, the base wider and bisinuate, from some directions appearing to be rounded. *Scutellum* convex, suboblong. *Elytra* almost four times the length of head and prothorax combined, at base about once and one-half the width of prothorax, near apex fully twice as wide; suture, 3rd, 5th (except at base) and 7th (especially at the shoulders) interstices raised and thickened, the interspaces with double rows of large square excavations or foveæ, sides oblique and with three uniform rows. Junction of *prosternum* with pronotum marked by a deep groove; abdomen long, the four basal segments feebly but distinctly transversely ridged. *Legs* thin; anterior tibiæ strongly, the intermediate feebly, curved; posterior straight. Length $13\frac{1}{2}$, width $4\frac{1}{3}$ mm.

Hab.—Sydney (types in Macleay Museum).

Not being at liberty to denude any of the (4) specimens before me, I have described the sculpture from what appears to be a

partially abraded female specimen, the others appearing to be all males. The impressions on the head cause four raised spaces to appear on the disc, and a lobe behind each eye; of the discal spaces the two front ones are about half the size of the two hind ones, and all four are raised at their outer anterior edges.

The second specimen, marked as having been "captured on steps of Elizabeth Bay House, January 19th, 1864," differs in being much smaller ($8 \times 2\frac{1}{4}$ mm.), the head and prothorax densely clothed with pale fawn-coloured scales, which entirely conceal the derm and sculpture, and with stout darker scales appearing in places; the antennæ, owing to the much denser clothing, appear to be stouter and with shorter joints, the apical joints are finely pubescent, the basal are supplied with stout scales; the elytra are clothed as in the large specimen, but rather more regularly; on both this and the two following specimens the scales of the under surface are as in the large specimens, except that on the head and prosternum they are somewhat denser and paler.

The third specimen is much smaller and narrower ($6 \times 1\frac{1}{2}$ mm.), and has the head so densely clothed that the sculpture is entirely hidden; the scales moreover have a slight reddish tinge.

The fourth specimen ($6\frac{1}{2} \times 1\frac{3}{5}$ mm.) appears (to the naked eye) to be prettily variegated with black and white, and the derm is considerably darker. The head, antennæ and prothorax are clothed as in the two preceding specimens, except that the prevailing colour is sooty, the flanks of the head and prothorax being of a very dingy white; elytra with sooty scales, and with large irregular patches of whitish scales towards the sides, one commencing at the shoulder and of a zig-zag shape which terminates beyond the middle, another almost fasciate near apex; the apex itself and part of the extreme margin with whitish scales.

CERAMBYCIDÆ.

PRIONOPLUS RETICULARIS, White.

Mr. Simson has shown me a living specimen of this fine New Zealand longicorn which was given him as having come from a window-sash made of kauri pine at Launceston (Tasmania).

COCCINELLIDÆ.

COCCINELLA RELIGIOSA, n.sp.

Briefly elliptic; shining. Upper surface glabrous, under finely pubescent. Testaceous; under surface slightly darker than upper but scarcely infusate; scutellum dark red (in some specimens almost black); each elytron with four small round black spots (besides one common to both on suture near apex), one near middle of base, two slightly before middle (one of which is rather close to suture and the other equally close to the side) and one at about one-third from apex and slightly nearer side than suture.

Head feebly punctate; clypeus rounded in front, sides feebly angular, but not margining eyes; eyes very finely faceted. *Prothorax* about twice as wide as the length down middle, sides and base regularly rounded, sides feebly margined; moderately densely, but not strongly punctate. *Scutellum* transversely triangular. *Elytra* densely but not strongly punctate except on the slightly margined sides, a row of infusate punctures (in a scarcely visible depression) commencing between basal spot and side, and continued along side (passing through lateral spot) to apex, but becoming diffused about suture; episterna wide, nowhere suddenly narrowed, feebly impressed near four posterior femora. Abdominal lamellæ almost touching 1st suture. Length $5\frac{1}{3}$, width $4\frac{1}{3}$ mm.

Hab. — Behn River, Wyndham, Derby, N.W.A. (Mr. R. Helms).

A very distinct species; the spots on each elytron are disposed in the form of a cross; on several the sutural spot is absent. I am not sure as to its correct genus, but no harm can result from placing it in *Coccinella*.

C. KINGI, MacI. *Hab.* — Tamworth, N.S.W.

C. REPANDA, Thunb. *Hab.* — New South Wales; Behn River, N.W.A.

C. ARCUATA, Fabr. *Hab.* — Tweed, Richmond and Clarence Rivers, N.S.W.

C. TRANSVERSALIS, Fabr. *Hab.*—South Australia, Victoria, Tasmania, New South Wales, Queensland; Rottnest Island, Gun Island, W.A.

CYCLONEDA BARRONENSIS, Blackb. *Hab.*—Barron Falls, N.Q.

NEDA TESTUDINARIA, Muls. *Hab.*—Coastal districts of New South Wales.

N. BOURGEOISI, De Ker. *Hab.*—New South Wales.

ALESIA FRENATA, Er. *Hab.*—Sydney.

A. STRIGULA, Boisd. *Hab.*—Richmond and Clarence Rivers.

CHILOMENES QUADRIPUSTULATUS, Muls. *Hab.*—West Australia (widely distributed).

LEIS CONFORMIS, Boisd., var. *OCCIDENTALIS*.*

Typical specimens (which I have from Queensland, New South Wales, Victoria and Tasmania) of this species do not occur in Western Australia; but from Mount Barker I have specimens of a very distinctly marked variety which I have named as above. The variety differs from typical specimens in having the prothorax black except for a narrow border at the apex and sides, or sides only, sometimes with a very narrow stripe along the front of the median line. On the elytra all the spots (with the exception of the humeral) are joined together, the 2nd and 3rd transverse rows (of typical specimens) appearing as a wide transverse fascia extending to both sides and suture, but with sinuous internal margins; on each shoulder is a large spot enlarged towards the suture, not two spots as in specimens from New South Wales and in the majority from Tasmania. The legs, with the exception of the tarsi, are entirely black.

I could find absolutely no differences in the eggs, larval stages, and pupæ of typical specimens and the variety, having had those of both under observation at the same time.

* A text-figure of this variety has been given in the Journal of the Bureau of Agriculture of Western Australia for 1897, p. 1433.

HALYZIA MELLYI, Muls.

I have this species from Tasmania, Mt. Kosciusko, and S.W. Australia. The western specimens differ from the others in being smaller, the black markings reduced in size, and the third fascia broken up into two spots on each elytron.

H. GALBULA, Muls. *Hab.*—Sydney.*

H. EDWARDSI, Muls. *Hab.*—Gosford, Richmond River, N.S.W.

H. PASCOEI, Crotch. *Hab.*—New South Wales.

COELOPHORA JANSONI, Crotch. *Hab.*—Somerset, N.Q.

C. GUTTATA, Blackb. *Hab.*—Cairns, N.Q.

C. MASTERSI, Blackb. *Hab.*—Somerset.

C. VERANOIDES, Blackb. *Hab.*—Sydney, Tweed River, N.S.W.; Behn River, N.W.A.

ORCUS PURPUREOTINCTUS, n.sp.

Metallic-blue with a purplish lustre; under surface (except epipleuræ), antennæ, palpi and legs yellow. Head with sparse fine golden pubescence in front.

Head moderately punctate; clypeus distinctly expanded on each side in front of eyes. Prothorax more densely punctate than head or elytra, its sides strigose. Epipleuræ shallowly foveate. Length 5 mm.

Hab.—Behn River, N.W.A. (Mr. R. Helms).

The extreme anterior margins of the prothorax are testaceous, but unless closely examined the whole upper surface appears to be blue; the head is somewhat green, with the dilated portions of the clypeus brown. The shape is that of *chalybeus*, but the punctures are decidedly stronger; *punctulatus* is described as having the prosternum concolorous with the abdomen. I have seen four specimens.

ORCUS CITRI, n.sp.

Blackish-blue with a slight coppery gloss; prothorax testaceous but darker along middle; under surface and legs piceous-blue or

piceous with a coppery gloss; apex and sides of abdomen testaceous, the tarsi, knees and trochanter ferruginous.

Head densely punctate; clypeus strongly expanded on each side. Prothorax moderately densely punctate, the sides not strigose. Elytra densely and very distinctly punctate; epipleuræ not foveate. Length 3 mm.

Hab.—Tamworth, N.S.W. (on orange trees).

Appears to be allied to *splendens*, but very differently coloured. The punctures are much coarser than in *chalybeus*. On one specimen the dark marking of the prothorax somewhat resembles a \perp with the stem dilated in the middle; on a second specimen it is more like a mushroom; on both it appears to be fuscous with a coppery-green (or blue) gloss.

ORCUS AUSTRALASIE, Boisd.

This is a most variable species both as regards marking and size. With the exception of *C. transversalis* it appears also to be more widely distributed than any other Australian ladybird. My specimens vary in length from 4 to 7 mm. The ground colour is usually a bright metallic-blue, but I have specimens with a decided greenish gloss and others which are almost black. On typical specimens the spots vary considerably in size, and the humeral one in shape; on the variety *nummularis** the apical spots vary considerably in shape. I have another distinctly marked variety which I propose to name—

Var. QUADRINOTATUS.

In this variety the elytral spots are conjoined so as to form two transverse markings on each elytron, those at the base being more or less dumb-bell-shaped and interrupted close to suture; the apical spots are large and irregularly transversely oblong. All the specimens I have seen are from Western Australia; on

* Mr. A. Koebelé informed the Rev. T. Blackburn that he found *nummularis* and *Australasie* to be distinct species, but in this he was certainly mistaken.

one of them the basal and apical marks are joined by a narrow stripe towards each side.

O. LAFERTEI, Muls. *Hab.*—Brisbane, Q.: Tweed River, N.S.W.

O. QUADRIMACULATUS, De Ker. *Hab.*—King's Sound, N.W.A.; Sydney, N.S.W.

O. BILUNULATUS, Boisd. *Hab.*—New South Wales, Tasmania.

O. CHALYBEUS, Boisd. *Hab.*—Brisbane, Sydney.

CHILOCORUS BAILEYI, Blackb. *Hab.*—Somerset, N.Q.

NOVIUS TRIDENS, n.sp.

Head, prothorax and scutellum piceous-black; sterna and legs (tarsi excepted) piceous, anterior tibiae paler; elytra (including epipleurae) sanguineous, the sides and suture clouded with piceous; on the sides not quite to base, on suture to base but rather indistinctly so; abdomen dull brownish-red. Clothed with short yellowish-white pubescence. Length 3 mm.

Hab.—Sydney, N.S.W.

Differs from *cardinalis*, besides markings, in being smaller, less convex, and with much finer punctures; the dark markings on the elytra are somewhat trident-shaped. The specimen described is from the collection of the late Mr. A. Sidney Olliff, and bears a label in the handwriting of the Rev. T. Blackburn "Novius sp.n."

NOVIUS IMMACULATUS, n.sp.

Piceous-black; antennae, palpi, tarsi, four anterior and part of posterior tibiae brownish-red. Clothed with short ashen pubescence.

Head and prothorax finely, elytra densely and moderately finely punctate. Abdomen with six segments. Length $2\frac{1}{3}$ mm.

Hab.—Swan River, W.A.

In this species red has entirely disappeared from the upper surface. In shape it strongly resembles *N. Lindi*, and I should probably have taken it for a variety of that species but that the punctures are rather denser and stronger, and the pubescence is

slightly longer and with a more decided yellowish tinge. A specimen from Geraldton (which appears to be immature) probably belongs to this species; it has the elytra the colour of dried blood, with the margins and epipleuræ and part of the abdomen reddish-testaceous.

NOVIUS BELLUS, Blackb.

This species is by no means constant as regards its markings. The ♂ (I have several pairs which were taken *in cop.*) is usually smaller and darker, the red sutural marking is frequently abbreviated, and sometimes divided into two portions; in the ♀ it is often shaped like a New Guinea fish-hook. I have specimens from New South Wales, South and West Australia. Western specimens are usually much darker than eastern ones. I have one specimen in which each elytron is supplied with but three (rather small) distinct spots: one close to scutellum, one close to suture just before middle, and one humeral.

NOVIUS KOEBELEI (Olliff MS.).

This species was never described by the late Mr. A. Sidney Olliff, but as it is well known in the United States (where several coloured figures of it have been published) Mr. Olliff's name (unless indeed the species should prove to be synonymous with *sanguinolentus*) will probably stand. I have specimens from the Richmond River.

N. CARDINALIS, Muls. *Hab.*—New South Wales, Tasmania, West Australia.

N. LINDI, Blackb. *Hab.*—Swan River.

HYPOCERAS MULSANTI, Chp. *Hab.*—North Queensland.

RHIZOBIUS TRICOLOR, n.sp.

Elongate, subelliptic. Head, prothorax, sterna, legs (tarsi and knees excepted) black; elytra blue (in places and from some directions with a greenish or coppery gloss); antennæ, palpi and abdomen blood-red. Rather densely clothed with white pubescence which is waved on the elytra.

Densely punctate, the head and prothorax moderately finely, the elytra coarsely except in the vicinity of the (slightly raised) suture. Metasternum rather coarsely punctate and transversely wrinkled. Abdominal lamellæ more coarsely punctured than and terminated considerably before apex of basal segment. Length 5, width $3\frac{1}{2}$ mm.

Hab.—Hobart, Tas. (Griffith & Lea).

Much larger than the three blue species (*cyaneus*, *cæruleus* and *eminens*) hitherto described and the under surface differently coloured. To the naked eye the elytra appear to be devoid of pubescence in patches, and these patches vary in position as the insect is moved.

RHIZOBIUS CALOMELOIDES, n.sp.

Rather elongate-elliptic. Dark yellowish-red (almost sanguineous), prothorax with a piceous blotch on each side of middle, elytra (margins and suture excepted) piceous-brown or chocolate-red. Clothed with rather long yellowish pubescence interspersed with longer straggling hairs of a similar colour; pubescence of under surface similarly coloured but unmixed and shorter.

Head somewhat irregularly but rather feebly punctate. Prothorax densely, moderately strongly and somewhat irregularly punctate; scarcely twice as wide as the length down middle; sides strongly rounded. Elytra densely, coarsely and irregularly punctate and with small punctures interspersed, near suture a few large ones causing an appearance almost of striation, suture itself feebly punctate. Intercoxal process of prosternum feebly depressed, its sides distinctly carinate. Metasternum almost impunctate in middle, towards sides becoming rather densely punctate. Abdomen densely punctate, the basal segment irregularly so, largest punctures immediately behind lamellæ, these small, shining and rather strongly punctate. Length 5, width $3\frac{1}{2}$ (vix) mm.

Hab.—Tasmania (Mr. A. Simson, No. 3620), Hobart (Griffith & Lea).

The piceous blotches of the prothorax (to the naked eye) appear to be conjoined and to occupy about one-third of the surface; the

elytra (except along the margins and suture) are almost the colour of dried blood. The character of the markings and the shape of this species are reminiscent of *Calomela*.

RHIZOBIUS VIRGATUS, n.sp.

Oblong-ovate, rather strongly convex, shining. Dark red; mouth-parts, antennæ and legs paler; each elytron with two longitudinal black stripes, the inner commencing near base and terminating near apex, the outer midway between the inner black stripe and the margin and joined to the inner stripe at its apex but not at its base. Clothed with moderately dense and rather long ashen pubescence interspersed with numerous long erect dark setæ; under surface finely pubescent.

Head and prothorax finely, the elytra densely and coarsely but almost regularly punctate, punctures finer in vicinity of suture than elsewhere. Intercoxal process of prosternum depressed, rather wide, not at all triangular. Metasternum moderately strongly punctate and very feebly transversely wrinkled. Abdomen feebly punctate in middle, moderately strongly at sides; lamellæ terminating at about one-third from suture. Length $2\frac{1}{4}$ mm.

Hab.—Hobart.

Resembles *dorsalis* in shape and in colour to a certain extent, but differs in having two black and three dark red stripes on each elytron, in the setæ being considerably longer and the punctures coarser.

RHIZOBIUS ALPHABETICUS, n.sp.

Ovate, moderately convex and moderately shining. Pale testaceous; prothorax clouded with piceous in middle; elytra with angular and variable piceous markings; under surface reddish-testaceous, the sides infusate or not; mouth-parts, antennæ, legs and epipleuræ testaceous. Clothed with moderately short yellowish pubescence mixed with a few short and scarcely visible setæ.

Elytra densely and (except in immediate vicinity of suture) rather coarsely punctate. Intercoxal process of prosternum

rather wide and depressed. Metasternum and basal segment of abdomen scarcely visibly punctate in middle; apical segments moderately strongly punctate; lamellæ extending but little more than half way to first suture. Length $1\frac{5}{6}$ - $2\frac{1}{3}$ mm.

Hab.—Tasmania (Mr. A. Simson, No. 3804), Hobart, Bruny Island (Lea).

Of four specimens under examination no two have the elytral markings alike; on three of them the suture is narrowly piceous throughout, on the fourth it is scarcely darkened. On one the piceous markings form an irregular U behind the scutellum, and about the middle of each an irregular h (correct on the left and reversed on the right elytron) joined together by a transverse fascia at about one-third from apex; on another specimen the h is present but rather indistinct, and the basal U is not continued across suture; on the third specimen the markings are much narrower and consist of a short broad U near the base, a transverse fascia at one-third from apex and a slightly curved and disconnected stripe slightly nearer the side than suture; the fourth specimen resembles the third to a certain extent, but the markings are less sharply defined and the basal U appears as a V.

RHIZOBIUS CORTICALIS, n.sp.

Oblong-ovate, subdepressed, feebly shining. Reddish-brown or brownish-red, prothorax slightly paler than elytra; head, under surface (including epipleuræ) and appendages dark testaceous (or brownish) red; metasternum slightly infuscate or not. Densely clothed with short yellowish pubescence (more or less waved on elytra) interspersed with long brownish setæ, which are more numerous at the sides than on the middle.

Prothorax comparatively strongly punctate. Elytra densely and strongly punctate. Intercostal process of prosternum wedge-shaped, its sides carinate. Metasternum distinctly transversely wrinkled and (except for a rather large space about middle of apex) coarsely punctate. Abdomen densely punctate, punctures less regular and smaller on basal segment than elsewhere, but a

few large ones at extreme base between coxæ; lamellæ terminating at about one-third their length from suture. Length $3\frac{2}{3}$ mm.

Hab.—Geraldton, W.A. (under bark of *Nuytsia floribunda*).

Close to *discolor*, but the clothing very different and punctures of under surface less regular; the colour also is different.

RHIZOBIUS CONFINIS, n.sp.

Oblong-ovate, moderately convex, shining. Reddish-brown; anterior (and less distinctly the lateral) margins of prothorax, head, under surface (epipleuræ piceous-brown and metasternum red) and appendages testaceous. Clothed with moderately short white hairs (feebly waved on elytra), mingled with yellowish erect setæ.

Punctures of prothorax and elytra and shape of prosternum as in the preceding. Metasternum densely, strongly and almost regularly punctate throughout and feebly transversely wrinkled. Abdomen densely punctate, the basal segment irregularly so, but rather coarsely between coxæ; lamellæ extending to about one-fourth from suture. Length $3\frac{1}{3}$ mm.

Hab.—Garden Island, W.A.

Remarkably close to the preceding species, but differs in being more convex, paler, setæ and epipleuræ differently coloured and punctures of metasternum very different.

RHIZOBIUS OCCIDENTALIS, Blackb.

Pale testaceous, under surface (except epipleuræ which are very pale) darker; metasternum slightly infusate or not; elytra with piceous or brown, and more or less variable markings. Length $1\frac{1}{3}$ – $1\frac{2}{3}$ mm.

Hab.—Swan River, Vasse, Rottnest Island, W.A.

On each of four specimens there are two short transverse arcuate fasciæ (the convex side directed towards apex), a narrow one just behind middle and a wider one between it and apex, a faint blotch on each side at base, and signs of a feeble sublateral stripe; on a fifth specimen the median fasciæ are absent; on a sixth all the markings are present but the lateral stripe is distinct



and joined to the basal spot; on a 7th (and very pale) specimen the two fasciæ appear more like small spots, each of the basal spots is very small, and the lateral stripe has disappeared except for a small spot opposite the apical fascia. Of the seven specimens, five have the prothorax absolutely clear; in the other two there is a slight fuscous tinge in the middle; the sutural line is narrow in all.

I had a full description of this species written out as new, but thinking it possible that Mr. Blackburn's unique type of *occidentalis* was one of its varieties, asked his opinion thereon, and he stated that the specimen I sent him was certainly *occidentalis*.

RHIZOBIUS HIRTELLUS, Crotch.

I have numerous specimens which I refer to this species, and which have the head, prothorax and legs red, the elytra piceous with a coppery gloss, and clothed with ashy pubescence mingled with longer and darker hairs. In many of them the sterna and abdomen are piceous, sometimes ferruginous; occasionally the abdomen is dark ferruginous with indistinct reddish blotches at the sides; several specimens have the elytral margins diluted with red; the legs are occasionally tinged with piceous; on several there is a feeble piceous cloud on the disc of the prothorax. The pubescence varies in density and slightly in length. The smaller specimens are generally more convex than the larger ones. The size varies from $1\frac{1}{2}$ to 3 mm. I have specimens from Brisbane Q.; Sydney, Forest Reefs and Tamworth, N.S.W.; Hobart, Tasm.; and Geraldton, Pinjarrah, Swan River, Rottnest and Garden Islands, Boyanup, Darling Ranges and Mount Barker, W.A. The species is a very useful one, and may frequently be seen in citrous and other orchards, where it feeds especially on the "San Jose," "red" and "greedy" scales (*Aspidiotus perniciosus*, *aurantii* and *rapax*); its larvæ are severely parasitised by a Chalcid wasp.

RHIZOBIUS DISCIPENNIS, Blackb.

A specimen (from the Richmond River) under examination probably belongs to this species, but it differs from the Rev. T.

Blackburn's description in being smaller (not quite 2 mm.), and in having the elytra black except for a rather indistinct reddish vitta on each side (extending from about one-fourth from base to one-fourth from apex). The levigate sutural space extends to about the middle, and is very distinctly margined by large and closely seriate punctures. The basal segment of abdomen is densely and rather coarsely punctate, the punctures being denser, but somewhat smaller and deeper than those of metasternum.

RHIZOBIUS BREWERI, Crotch.

Two specimens from the Swan River possibly belong to this species, as they are very closely allied to *discolor*; besides the differences mentioned by Mr. Crotch, they are slightly more convex, and with setæ distributed amongst the pubescence.

R. SATELLES, Blackb. *Hab.*—Clarence River, Armidale, Sydney, Gosford, N.S.W.

R. CÆCUS, Blackb. *Hab.*—Sydney, Gosford, N.S.W.

R. PULCHER, Blackb. *Hab.*—Glen Innes, Armidale, N.S.W.; Hobart, Bruny Island, Tasm.

R. NIGRONOTATA, Blackb. *Hab.*—Gosford, N.S.W.

R. UMBRATUS, Blackb. *Hab.*—Mount Lofty, S.A.

R. APICALIS, Blackb. *Hab.*—Sydney, Armidale, N.S.W.

R. NITIDUS, Blackb. *Hab.*—Mount Barker, Swan River, W.A.

R. FUGAX, Blackb. *Hab.*—Forest Reefs, Glen Innes, N.S.W.; Melbourne, Vic.

R. PLEBEIUS, Blackb. *Hab.*—Sydney.

R. INSIPIDUS, Blackb. *Hab.*—Sydney.

R. LINDI, Blackb. *Hab.*—Swan River, Rottnest Island, Geraldton, W.A.; Sydney, N.S.W.; Hobart, Tasm.

R. BOUCARDI, Crotch. *Hab.*—New South Wales.

R. VENTRALIS, Er. *Hab.*—Tasmania, New South Wales, West Australia.

R. DISCOLOR, Er. *Hab.*—Tasmania, New South Wales.

CRYPTOLÆMUS MONTROUZIERI, Muls. *Hab.*—New South Wales; widely distributed.

SCYMNUS STRIATUS, n.sp

Suboblong, strongly convex, shining. Testaceous; elytra with fuscous markings; legs testaceous, under surface darker.

Upper surface densely and finely punctate; elytra with an appearance as of striation especially near the suture. Intercoxal process of prosternum truncate, sides carinate. Sterna (except middle of metasternum) and abdomen rather densely punctate; 1st suture just traceable across middle; lamellæ extending to suture. Length $1\frac{2}{3}$ -2 mm.

Hab.—North West Australia (Macleay Museum).

At first sight not unlike some of the paler varieties of *Sydneyensis*, but narrower, more parallel-sided, and with different punctures to that species. The markings are tortoise-shell-like, but are nowhere sharply defined. On one specimen there is a moderately well defined dark spot on each side of elytra at base, a transverse similarly coloured irregular fascia beyond middle (moderately well defined on its posterior edge only, and not extending to sides), and a feeble fascia near apex; between these two is a well defined pallid zig-zag fascia. The other and larger specimen is paler, and with the markings still more obscure. On both the suture and base of elytra are dark brown. The elytra appear to be feebly striate owing to rows of punctures (not distinctly traceable themselves) being infuscate; of these rows only one (on each side of the suture) is at all sharply defined, the others being traceable with more or less difficulty.

SCYMNUS TRILOBUS, n.sp.

Ovate, moderately convex, shining. Black; apical two-fifths of elytra, abdomen, mouth-parts, antennæ, tibiæ and tarsi reddish-testaceous; coxæ, trochanter, base and apex of femora dark red; epipleura piceous. Moderately densely clothed with whitish pubescence.

Densely, the elytra rather coarsely, punctate; punctures finer at apex and along suture than elsewhere. Intercoxal process of

prosternum wide, truncate at base and apex, feebly constricted in middle, sides carinate. Metasternum indistinctly transversely wrinkled. Abdomen moderately densely punctate; lamellæ extending to suture, this just traceable across middle. Length $2\frac{1}{3}$ mm.

Hab.—Armidale, N.S.W.; Hobart, Tasm.

I believe the specimen under examination to be ♂, although the head and prothorax are entirely black. The apical patch of the elytra appears to be almost trilobed owing to its slight extension along suture and sides. In colour it resembles *Rhizobius apicalis* and (except for the under surface and legs) the ♀ of *S. Meyricki*.

SCYMNUS INDISTINCTUS, n.sp.

Oblong-ovate, convex, shining. Black; head, anterior angles of prothorax, mouth-parts, antennæ, anterior legs and all the tarsi testaceous; four posterior tibiæ (with or without the femora) piceous- or testaceous-brown; basal half of epipleuræ brownish; apical third of elytra with a somewhat obscure reddish blotch. Clothed with fine, ashen-yellow pubescence.

Densely, the elytra moderately coarsely, punctate. Intercoxal process of prosternum wide, truncate; sides finely carinate. Metasternum polished, and almost impunctate in middle. Abdomen densely punctate; lamellæ narrowly touching suture, this traceable across middle with great difficulty. Length $1\frac{4}{5}$ -2 mm.

Hab.—Forest Reefs, N.S.W.

Somewhat resembles *Meyricki* in colour, but less ovate and considerably smaller than that species, the apical markings more obscure, &c. I have three specimens (all males) under examination.

SCYMNUS TRIANGULARIS, n.sp.

Oblong-ovate, depressed, feebly shining. Testaceous; under surface (except epipleuræ) and a large triangular elytral patch infuscate. Clothed with very fine ashen pubescence.

Intercoxal process of prosternum truncate. First ventral suture obsolete in middle. Length 1 mm.

Hab.—Windsor, N.S.W. (two specimens in flood débris).

With the exception of *vagans*, this is the smallest species I am acquainted with in the genus. The elytra have a brownish patch extending almost across the entire base, its sides directed obliquely to suture near apex (but feebly incurved), so that in shape it is much like an isosceles triangle; the sides are paler than the head and prothorax. Under a Coddington lens I have not been able to see any punctures, nor have I been able to so fix the legs as to expose the abdominal lamellæ.

SCYMNUS COMPOSITUS, n.sp.

Elliptic-oblong, moderately convex, shining. Reddish-testaceous; sterna and abdomen (apex excepted or not) darker; elytra paler but marked with fuscous at base (except near extreme shoulders), rather widely along suture, at apex, and rather indistinctly at sides. Rather densely clothed with short ashen pubescence, as long on under as on upper surface.

Head and prothorax minutely, elytra comparatively strongly, punctate. Intercostal process of prosternum comparatively narrow and strongly carinate. Abdomen moderately densely punctate; 1st suture traceable across middle; lamellæ not quite extending to suture, and rather more coarsely punctate than elsewhere. Femora stouter than usual. Length $1\frac{5}{8}$ mm.

Hab.—Tamworth, N.S.W.

In colour and shape closer to the preceding than any other species with which I am acquainted; but apart from the great difference in size, it differs in having the sutural marking much less triangular and dilated at the apex, and with the sides infusate, so that each elytron appears to be supplied with a somewhat elliptic testaceous blotch.

SCYMNUS MIMICUS, n.sp.

Elliptic-ovate, moderately convex, moderately shiny. Prothorax (sides and anterior edge excepted), scutellum, sterna and abdomen (apical segments more or less diluted) piceous or piceous-brown; head and epipleuræ brown; femora testaceous-brown, tibiæ and tarsi pale testaceous; elytra obscure brownish-testaceous, with

piceous spots more or less conjoined and distinct or not; suture and sides narrowly piceous. Clothed with short ashen pubescence, rather longer on sides of prothorax than elsewhere; under surface (except at sides, and then but moderately) sparsely and very finely pubescent.

Upper surface very finely and (elytra included) indistinctly punctate. Intercoxal process of prosternum moderately wide, its sides rather finely carinate. Metasternum rather strongly punctate at sides, but finely in middle. Abdomen moderately strongly punctate; 1st suture traceable across middle; lamellæ large, touching suture for the greater part of their width, more distinctly punctate at sides than towards middle. Length $2\frac{2}{5}$ mm.

Hab.—Tamworth, N.S.W.

On the elytra there is a quadrangular spot close to the base, from each of the anterior angles of which an indistinct stripe is directed to each shoulder; from each of its posterior angles a short stripe is directed hindward, and terminates in a round spot, the whole (if the scutellum is included) bearing a ludicrous resemblance to a man with outstretched arms and legs; on each side between this figure and the side is a U-shaped dark patch, the latter rather indistinct owing to a small spot between its terminations; at about one-third from apex there is an indistinct narrow transverse stripe, and the apex itself is slightly infuscate. The suture appears to be finely carinate, but this appearance is caused solely by its colour. In shape and colour this species strongly resembles many of the species belonging to *Trogoderma* of the *Dermestidae*.

SCYMNUS VITTIPENNIS, n.sp.

Ovate, moderately convex, shining. Piceous-black; under surface (apical segments of abdomen paler) piceous-brown; mouth-parts, antennæ, legs and basal half of epipleuræ testaceous; each elytron with a very distinct testaceous and moderately wide vitta, commencing on each shoulder and not quite reaching apex or suture. Clothed with moderately short ashen pubescence.

Elytra moderately distinctly punctate. Intercoxal process of prosternum rather wide and depressed. Abdomen moderately

densely punctate; 1st suture traceable (in certain lights) across middle; lamellæ rather large, but touching suture for but a very short distance. Length $1\frac{3}{4}$ mm.

Hab.—Forest Reefs, N.S.W.

The testaceous vittæ of the elytra touch the extreme margins in the humeral regions only.

SCYMNUS PECTORALIS, n.sp.

Oblong-ovate, moderately strongly convex, shining. Pale brownish-testaceous; head, sides and anterior margins of prothorax slightly paler; scutellum piceous; each elytron with about five small pale testaceous blotches (moderately well defined to the naked eye, but indistinct under a lens); suture near base with a brownish blotch, from each of the anterior angles of which an indistinct oblique stripe connects it with an angular and well defined spot; meso- and metasternum shining black, all the rest of the under surface (except basal segment of abdomen and epipleuræ, which are slightly infuscate) and the appendages testaceous. Clothed with short ashen pubescence similar on both under and upper surfaces.

Upper surface finely (scarcely visibly) punctate. Elytral suture finely carinate. Intercostal process of prosternum flattened, its sides finely carinate. Abdomen densely and comparatively strongly punctate; 1st suture traceable across middle (from some directions rather distinctly so); lamellæ large and wide, but nowhere (behind the coxæ almost) touching suture. Length 2 mm.

Hab.—Armidale, N.S.W.

The spots or blotches are much more distinct in the vicinity of the scutellum than elsewhere, the elytra there having the appearance of tortoise-shell. The metasternum is almost as visibly punctate in the middle, and almost as densely clothed as at the sides. The markings are very different from those of any species with which I am acquainted; the shape is much the same as that of *obumbratus*.

SCYMNUS FRATER, n.sp.

♂. Oblong-ovate, convex, moderately shiny. Black; abdomen dark brown; head down middle, anterior angles of prothorax, mouth-parts, antennæ, anterior legs, part of four posterior tibiæ, and all the tarsi testaceous. Clothed with dense, moderately short, yellowish pubescence.

Elytra densely and (for the genus) rather strongly punctate, punctures clearly defined. Intercoxal process of prosternum wide, depressed, constricted in middle. Abdomen (except basal segment) densely punctate; 1st suture distinct across middle; lamellæ touching suture for a considerable part of their width. Length $2\frac{1}{2}$ mm.

♀. Differs in having the head and prothorax entirely black; the legs (except the tarsi which are testaceous, and the anterior tibiæ which are obscure brown) are also black.

Hab.—Galston (Mr. W. Dumbrell), Armidale and Tamworth (Lea), N.S.W.

Of the shape of *flavifrons*, but very much larger, and colour, &c., different. The 1st ventral suture is very distinct from all directions except when seen from the head; it is not deeply impressed, however. The eyes are large, finely faceted, and not at all oblique in position.

SCYMNUS ELUTUS, n.sp.

Elliptic-ovate, subdepressed, shining. Head and prothorax piceous; elytra brownish-testaceous, the suture narrowly piceous; under surface dark reddish-brown; mouth-parts, antennæ, legs and epipleuræ testaceous. Clothed with moderately short ashen pubescence.

Elytra distinctly but not very coarsely or densely punctate; suture feebly carinate towards apex. Intercoxal process of prosternum flat, moderately wide; sides finely carinate. Abdomen densely punctate; 1st suture traceable with great difficulty (and only from certain directions) across middle; lamellæ touching suture for the greater part of their width. Length $1\frac{2}{5}$ mm.

Hab.—Forest Reefs, N.S.W.

The suture, owing to its colour, appears to be carinate throughout, but is really carinate (and very feebly so) only towards apex. I have a specimen from Hobart which I believe belongs to this species, but which has the femora piceous.

SCYMNUS VAGANS, Blackb.

A common species widely distributed in New South Wales, Tasmania and Western Australia, and which may frequently be seen feeding on "red spider" (*Tetranychus telarius*). Two Tasmanian specimens have the elytra dark reddish-brown instead of black.

SCYMNUS FLAVIFRONS, Blackb.

Widely distributed in New South Wales, Tasmania and Western Australia, and very variable in size and to a certain extent in colour.

S. NOTESCENS, Blackb. *Hab.*—New South Wales, South Australia, Western Australia, Tasmania.

S. SYDNEYENSIS, Blackb. *Hab.*—Tamworth, Armidale, Forest Reefs, N.S.W.: Brisbane, Q. (A beautiful and very variable species).

S. MEYRICKI, Blackb. *Hab.*—Forest Reefs, N.S.W.; Geraldton, Swan River, W.A.

S. INSIDIOSUS, Blackb. *Hab.*—Inverell, N.S.W.

S. MITIOR, Blackb. *Hab.*—Clarence River, N.S.W.

S. WHITTONENSIS, Blackb. *Hab.*—Whitton, N.S.W.

S. INAFFECTATUS, Blackb. *Hab.*—Sydney.

S. IMPICTUS, Blackb. *Hab.*—Tweed and Richmond Rivers, N.S.W.

S. OBUMBRATUS, Blackb. *Hab.*—Glen Innes, Armidale, N.S.W.

S. AUSTRALASIE, Blackb. *Hab.*—Tamworth, Forest Reefs, N.S.W.

S. PARALLELUS, Blackb. *Hab.*—Forest Reefs.

S. AUSTRALIS, Blackb. *Hab.*—Geraldton, W.A.

PLATYOMUS IMMACULATUS, Blackb. (*P. Eugenie*, Blackb.).

I have a pair of *immaculatus* which were taken *in cop.* at Tamworth; the female differs from the male in having the head, prothorax and anterior femora entirely black (or piceous) and with the anterior tibiae piceous on their outer edge. Mr. Blackburn thought it probable that his *Eugenie* was the female of *immaculatus*; *Eugenie* is said to differ in having the legs (tarsi excepted) and the head black; in the female under examination the anterior tibiae are yellow, except outwardly. I have a specimen (from Sydney) which is probably *Eugenie* and which has the legs (with the exception of the tarsi) entirely black; the prothorax is without the feeble frontal spots of the male of *immaculatus* and the punctures of the elytra are very regular (more noticeably so than in *P. Koebelei*).

P. CONSIMILIS, Blackb. *Hab.*—Forest Reefs, Tamworth, N.S.W.

P. LIVIDIGASTER, Muls. *Hab.*—Dalmorton, Tweed River, Byron Bay, Gosford, N.S.W.

P. KOEBELEI, Blackb. *Hab.*—New South Wales.

ERITHIONYX ALBATUS, n.sp.

Briefly ovate, strongly convex, shining. Black (with a brownish tinge); mouth-parts, antennæ, tarsi and abdomen reddish. Densely clothed with dull white semierect pubescence; under surface finely and sparsely pubescent, the femora with yellowish pubescence.

Upper surface densely, rather strongly, and almost regularly punctate; elytra more coarsely than prothorax; epipleuræ very densely punctate. Intercostal process of prosternum rather wide and flat, its sides carinate. Metasternum rather strongly punctate, and distinctly transversely wrinkled. Abdomen moderately punctate; lamellæ rather small, more coarsely punctate than elsewhere, terminated one-fourth from suture. Length 3, width $2\frac{1}{2}$ mm.

Hab.—Gosford, N.S.W.

At once distinguished from *lanosus* by its smaller size and white pubescence, which is also rather less erect and without the silken gloss of that species.

E. LANOSUS, Blackb. *Hab.*—Nerang, Q.

BUCOLUS NUYTSIÆ, n.sp.

Wide, depressed, shining. Reddish-brown; head, prothorax in middle, elytra along suture and towards sides, clouded with piceous; under surface and legs brownish-red, sterna slightly infusate. Clothed with very short yellowish pubescence; under surface with longer, paler and sparser pubescence, becoming rather long and straggling at sides of abdomen.

Densely and finely punctate, the elytra more noticeably than prothorax or head. Metasternum impunctate. Epipleuræ and abdomen finely punctate, basal segment of the latter from some directions apparently longitudinally strigose; lamellæ glabrous, impunctate, not extending to suture. Tibiæ strongly compressed, slightly angular outwardly. Length $3\frac{3}{4}$, width 3; variation in length 3-4 mm.

Hab.—Geraldton, Donnybrook, W.A. (beneath bark of the "Christmas Tree," *Nuytsia floribunda*).

To the naked eye the whole upper surface appears to be of a dark chestnut-brown, the piceous markings being scarcely traceable even with a glass; from some directions, however, they appear to be marked by two obscure testaceous maculæ (or vittæ). The antennæ extend back to the mesosternum; the anterior angles of the prothorax are slightly in advance of the head, and the outline of the elytra is continuous with that of the prothorax.

BUCOLUS NIGRIPES, n.sp.

Wide, depressed, feebly shining. Piceous-black; flanks of prothorax and disc of each elytron (usually very indistinctly) diluted with red; under surface (middle of prosternum infusate) except epipleuræ reddish-testaceous or pale chestnut-brown; legs shining black, tarsi reddish. Clothing as in the preceding species.

Densely and finely punctate, the elytra more noticeably than head or prothorax. Metasternum feebly, the abdomen more strongly (but rather irregularly) punctate; lamellæ shining, impunctate, nearly extending to suture. Tibiæ compressed, outer edges very feebly rounded. Length 4 (vix), width $3\frac{1}{2}$ mm.

Hab.—Tamworth, N.S.W.

Besides colour it differs from the preceding species in being slightly more convex, with rather stronger abdominal punctures, the elytral punctures equal throughout, not (as in that species) absent along suture, and with the tibiæ decidedly less angular.

BUCOLUS OBSCURUS, n.sp.

Moderately wide, depressed, shining. Black; abdomen, tarsi and antennæ reddish-brown; metasternum black or piceous. Clothing as in the two preceding species.

Densely and finely punctate, the prothorax fully as densely and but little less coarsely than elytra. Metasternum punctate at sides only. Abdomen finely and irregularly punctate; lamellæ shining, punctate at base, not extending to suture. Tibiæ strongly compressed, outwardly rounded. Length $3\frac{1}{6}$, width $2\frac{2}{3}$ mm.

Hab.—Frankford, Tasm. (Mr. J. J. Towers).

Smaller and more elongate than either of the preceding species, from both of which it may also be distinguished by its colour and by the prothoracic and elytral punctures being almost equal. In one specimen the abdomen is almost piceous, and in both the base of the first segment is darker than elsewhere.

A specimen from Forest Reefs, N.S.W., probably belongs to this species; it differs only in having the legs piceous-brown (slightly darker than the metasternum) and the entire abdomen reddish-testaceous. Neither the head nor flanks of its prothorax are paler than its elytra.

B. FOURNETI, Muls. *Hab.*—Armidale, N.S.W.

BUCOLELLUS ORNATUS, Blackb.

This pretty species is common in myrtaceous scrub about the coastal districts of Western Australia (I have specimens from

Swan River, Mount Barker, Albany and Karridale). The type specimen (judging by the description) appears to have been somewhat discoloured, as in nearly all the specimens under examination the pale testaceous markings (which are exactly as described and are not at all or very slightly variable) are sharply defined. Specimens vary in length from $\frac{4}{5}$ to 1 line.

SERANGIUM MICROSCOPICUM, n.sp.

Briefly ovate, moderately convex, highly polished. Black; mouth-parts, antennæ and legs flavous. Head and prothorax with a few, the elytra with still fewer straggling whitish hairs.

Upper surface not visibly, the under surface finely punctate. Length 1 mm.

Hab.—Behn River, N.W.A. (Mr. R. Helms).

Like *bicolor*, but at once distinguished by its much smaller size and pallid legs.

SERANGIUM NIGRUM, n.sp.

Briefly ovate, strongly convex, moderately polished. Black; tarsi testaceous or ferruginous, apical half of posterior tibiæ testaceous or not. Upper surface clothed with long, straggling, yellowish-white pubescence, rather denser on prothorax than on elytra; under surface (middle of metasternum glabrous) with fine yellowish pubescence.

Elytra with very fine punctures; under surface (except at sides of abdomen) indistinctly punctate. Length 2 mm.

Hab.—Hobart, Tasm.

The entirely black (except for tarsi and occasionally part of tibiæ) colour should render this species easily recognised; from *bicolor* it differs (besides colour) in being larger, with longer and more regular pubescence and with punctate elytra; the punctures, though small, are traceable with a Coddington lens. From above (except that it is less densely clothed) it strongly resembles *Erithionyx lanosus* in miniature.

SERANGIUM PUNCTIPENNE, n.sp.

Briefly ovate, strongly convex, highly polished. Black; mouth-parts, antennæ and tarsi obscure testaceous. Head and prothorax

with long white pubescence, continued on to base and (very feebly) along the sides of elytra; under surface (except at sides) highly polished and almost glabrous.

Elytra with regular and very distinct, but not dense or coarse, punctures; prothorax with somewhat similar punctures, but partially concealed by clothing. Sterna punctate at sides. Abdomen rather coarsely but somewhat irregularly punctate, the basal segment being impunctate across middle (except at base and apex), and the other segments indistinctly punctate in middle; lamellæ distinctly punctate. Length $1\frac{2}{3}$ mm.

Hab.—Tamworth, N.S.W.; Geraldton, W.A.

Like *bicolor*, from which it is distinguished by its very evident punctures and by its clothing. The specimens from Geraldton are smaller ($1\frac{1}{2}$ mm. only) than those from Tamworth, and the tarsi are almost piceous, but I do not think that they represent a distinct species.

SERANGIUM MÆSTUM, n.sp.

Briefly ovate, strongly convex, moderately polished. Dark brownish-black; legs brown; tarsi, tibiæ (wholly or in part), antennæ and palpi testaceous; epipleuræ and apical segments piceous-brown. Upper surface with long, straggling, yellowish pubescence, almost absent in middle; flanks of sterna and the legs finely pubescent.

Elytra just perceptibly punctate; epipleuræ distinctly excavated to outer margin to receive hind femora. Sterna impunctate in middle. Abdomen moderately strongly punctate; a transverse impunctate space in middle of basal segment. Length $1\frac{2}{3}$ mm.

Hab.—Swan River, Geraldton, W.A.

Very close to *bicolor*, but the pubescence longer, more evenly distributed and darker, and with the elytra feebly (but noticeably) punctate. The colour of the derm also is not of the intense black so characteristic of that species. In the seven specimens under examination a central space occupying from behind scutellum to the apical half of elytra is almost entirely devoid of clothing.

SERANGIUM OBSCURIPES, n.sp.

Briefly ovate, moderately convex, not very highly polished. Black; mouth-parts and legs piceous, the anterior tibiæ somewhat paler. Clothed (except on middle of elytra) with moderately long whitish pubescence; under surface almost glabrous.

Elytra densely, regularly and finely but distinctly punctate. Under surface punctate at sides, and basal segment of abdomen across middle. Length $1\frac{1}{2}$ mm.

Hab.—New South Wales.

Differs from *bicolor* by the elytra being noticeably punctate and less polished; from the (as above noted) Geraldton specimens of *punctipenne* by having the elytra much more densely punctate, but the punctures finer and less distinct; from the preceding it is readily distinguished by its clothing, and by the colour of its legs.

S. MYSTICUM, Blackb. *Hab.*—West Australia. Widely distributed.

S. MACULIGERUM, Blackb. *Hab.*—Richmond River, N.S.W.

S. BICOLOR, Blackb. *Hab.*—Sydney, Gosford, N.S.W.; Wyndham, Behn River, N.W.A.

GYMNOSCYMNUS QUADRIMACULATUS, Blackb. *Hab.*—Sydney.

CYCLOSCYMNUS MINUTUS, Blackb. *Hab.*—Forest Reefs, N.S.W.; Hobart, Tasm.

CYREMA NIGELLUM, Blackb. *Hab.*—Swan River, Geraldton, W.A.

LIPERNES SUBVIRIDIS, Blackb. *Hab.*—Inverell, Gosford, Armidale, Galston, N.S.W.

MIDUS PYGMÆUS, Blackb. *Hab.*—Sydney.

EPILACHNA GUTTATOPUSTULATA, Fabr. *Hab.*—New South Wales, Queensland.

E. 28-PUNCTATA, Fabr. *Hab.*—New South Wales, Queensland, North West Australia.

SUPPLEMENTARY NOTE.—After the description of *Cupes varians* (p. 485) left my hands I had the opportunity of seeing three other specimens—one from Wentworth Falls (N.S.W.) in the collection of Mr. A. Simson; one, without locality, presented to me by Mr. French; and one quite recently taken at Sheffield, in Tasmania, by Mr. G. M. Griffith and given to his brother, Mr. H. H. D. Griffith. The Tasmanian specimen measures 12 mm. in length, and each of the scales on the head, prothorax and antennæ is distinctly traceable; the margins of the prothorax are slightly waved posteriorly and distinctly emarginate on each side of the anterior tooth (the sculpture of the prothorax is probably the same in the other specimens but obscured by the clothing); its antennæ extend back to slightly beyond the middle of the elytra, and the terminal joint is slightly longer than the third. On both it and the specimen from Mr. French dark scales on the elytra are disposed in stripes on the alternate interstices, four dark stripes being on the second and two on the fourth before their junction near the apex (*Feb. 10th, 1902*).